

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (10-98)
 Approved for use through 10/31/99. CMB 0651-0031
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/719,080
		Filing Date	11-21-2003
		First Named Inventor	GRAUPE
		Group Art Unit	1626
		Examiner Name	Anderson, Rebecca
Sheet	1	of	13
		Attorney Docket Number	USAV2001/0082 - US - CNT

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.*	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Paragraphs or Relevant Figures Appear
		Number	Kind Code ² (if known)			
RA		4,927,809		STUBER, et al.	05-22-1990	
RA		5,424,325		ANDO, et al.	06-13-1995	
RA		5,486,623		ZIMMERMAN, et al.	01-23-1996	
RA		5,489,618		MALLANO, et al.	03-12-1996	
RA		5,847,135		BEMIS, et al.	12-08-1998	
RA		5,852,007		CHATTERJEE, et al.	12-23-1998	
RA		5,874,424		BATCHELOR, et al.	02-23-1999	
RA		5,998,390		RAMAMURTHY, et al.	12-07-1999	
RA		6,004,939		SPRUCE, et al.	12-21-1999	
RA		6,022,861		SCARBOROUGH, et al.	02-08-2000	
RA		6,114,310		CHAMBERLAND, et al.	09-05-2000	
RA		6,124,333		MILLER, et al.	12-26-2000	
RA		6,255,453		GYORKOS	07-03-2001	
RA		6,353,017		ALTMAN, et al.	03-05-2002	
RA		6,455,502		BRYANT, et al.	09-24-2002	
RA		6,478,028		BRYANT, et al.	11-05-2002	
RA		6,492,382		GRAUPE, et al.	12-10-2002	
RA		6,606,739		BUYSSE	01-14-2003	
RA		6,576,630		LINK, et al.	06-10-2003	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.*	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Paragraphs or Relevant Figures Appear	T ³
		Office ³	Number ⁴	Kind Code ² (if known)				
RA		EP	EP 0272671		KRANTZ, et al.	06-29-1988		
RA		EP	EP 0281234		EDWARDS, et al.	11-17-1988		
RA		EP	EP 0355572		PAQUES, et al.	02-28-1990		
RA		EP	EP 0376012		ALBRIGHT, et al.	07-04-1990		
RA		EP	EP 0418683		HARA, et al.	04-03-1991		
RA		EP	EP 0536389		OKUBO, et al.	04-01-1993		
RA		EP	EP 0652009		DOVEY, et al.	10-05-1995		
RA		EP	EP 0754454		KOBAYASHI, et al.	01-22-1997		
RA		JP	JP 06192189		RYOICHI, et al.	07-12-1994		
RA		JP	JP 42009133		IRIKURA, et al.	05-06-1987		

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
-----------------------	--------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/5B/08A (10-99)
Approved for use through 10/31/99. OMB 0631-0031
Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE
Collection of Information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete If Known		
			Application Number	10/719,080	
			Filing Date	11-21-2003	
			First Named Inventor	GRAUPE	
			Group Art Unit	1628	
			Examiner Name	Anderson, Rebecca	
			Attorney Docket Number	USAV2001/0082 - US - CNT	
Sheet	2	of	13		

[illegible]

FOREIGN PATENT DOCUMENTS							
Examiner Initials ^a	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Paragraphs or Relevant Figures Appear	Type of Document
		Office ²	Number ³				
RA		JP	JP 63303888	YOSHIDA, et al.	12-08-1988		
RA		WO	WO 00/48992	TUCKER, et al.	08-24-2000		
RA		WO	WO 00/49007	TUCKER, et al.	08-24-2000		
RA		WO	WO 00/49008	TUCKER, et al.	08-24-2000		
RA		WO	WO 00/51998	CYWIN, et al.	09-08-2000		
RA		WO	WO 00/59881	SINGH, et al.	10-12-2000		
RA		WO	WO 00/69855	QUIBELL, et al.	11-23-2000		
RA		WO	WO 01/09110	BEKKALI, et al.	02-08-2001		
RA		WO	WO 01/18796	GRAUPE, et al.	03-22-2001		
RA		WO	WO 01/18808	GRAUPE	03-22-2001		

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
-----------------------	--------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (10-98)
 Approved for use through 10/31/99. OMB 0891-0031
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/719,080
		Filing Date	11-21-2003
		First Named Inventor	GRAUPE
		Group Art Unit	1826
		Examiner Name	Anderson, Rebecca
Sheet	6	of	13
		Attorney Docket Number	USAV2001/0082 - US - CNT

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
RA		ADAMS, et al., Potent and Selective Inhibitors of the Proteasome: Dipeptidyl Boronic Acids, Bioorganic & Medicinal Chemistry Letters, 8: 333-338 (1998).	
RA		ASHWORTH, et al., 4-Cyanothiazolidides as very potent, stable inhibitors of dipeptidyl peptidase IV, Bioorganic & Med. Chem. Letters, 8, Oxford, 6(22):2745-2748 (1996).	
RA		BERGEMAN, et al., Studies on the reactivity of alpha-cyano.alpha-isocyano alkanoates. Versatile synthons for the assembly of imidazoles, Helv.Chim. ACTA, 82(8):909-918 (1999).	
RA		BILLSON, et al., The Design and Synthesis of Inhibitors of the Cysteinyl , Bioorg. Med. Chem. Lett. vol. 8, pp. 993-998, 1998	
RA		BROMME, et al., Potent Inactivation of Cathepsins S and L , Biol. Chem. Hoppe-Seyler. vol. 375, No. 5, pp. 343-347, 1994.	
RA		CHATTERJEE, et al., D-Amino Acid Containing, High-Affinity Inhibitors of Recombinant Human Calpain I, Journal of Medicinal Chemistry, vol. 41, No. 15, p: 2663-2666 (1998).	
RA		COHEN, et al., Therapy of relapsing multiple sclerosis. Treatment approaches for nonresponders, Journal of Neuroimmunology, 88: 29-36 (1999).	
RA		DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protease by a single mutation, Biochemistry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1995).	
RA		EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Porcine Pancreatic Elastase and Ac-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).	
RA		EVOLI, et al., abstract only, Drugs, 1998, 52(5), 662-70	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
--------------------	--------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (10-06)
 Approved for use through 10/31/99. OMB 0651-0031
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/719,080
		Filing Date	11-21-2003
		First Named Inventor	GRAUPE
		Group Art Unit	1826
		Examiner Name	Anderson, Rebecca
		Attorney Docket Number	USAV2001/0082 - US - CNT
Sheet	7	of	13

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T‡
RA		GOUR-SALIN, et al., Inhibition of papain by peptide nitriles: conversion of the nitrile group into other functionalities via the papain:nitrile thiomidate ester adduct, Can. J. of Chem, CA, National Research Council, Ottawa, 69(8):1288-1297 (1991).	
RA		HALLEGUA, et al., Cyclosporine for lupus membranous nephritis: experience with ten patients and review of the literature, Lupus, 9: 241-251 (2000).	
RA		HANZLIK, et al., Reversible covalent binding of peptide nitriles to papain, Biochim. Biophys. Acta, vol. 1035, No. 1, 1990, pp. 62-70.	
RA		HARRIS, et al., Characteristics of a continuous fluorogenic assay for calpain I. Kinetic evaluation of peptide aldehydes, halomethyl ketones and (achalasia) methyl ketones as inhibitors of the enzyme, Chemical Abstracts, 110:7, Bioorg. Med. Chem. Lett, 5(4) 393-398 (1995).	
RA		HEITMILLER, R.F., abstract only., Semin. Thorac. Cardiovasc. Surg., 1999, 11(1), 41-6	
RA		KATRITZKY, et al., Benzotriazole-assisted synthesis of alpha-(acylamino) nitriles and a conceptually novel method for peptide elongation, Chem. Soc., Perkin Trans. 1(7):1853-1857 (1990).	
RA		KHAMASHTA, et al., Expert. Opin. Investig. Drugs, 2000, 9(7), 1581-83.	
RA		KRANTZ, et al., Peptidyl (Acylalkoxy)methyl Ketones and the Quiescent, Biochemistry, vol. 30, pp. 4678-4687, 1991	
RA		LEVY, E.G., Baillieres Clin. Endocrinol. Metab., 1997, 11(3) 585-695	
RA		LI, et al., Aminoacylpyrrolidine-2-nitriles: Potent and stable inhibitors of dipeptidyl-peptidase IV (CD 26), Archives of Biochem. and Bioph., 323(1)146-154 (1995).	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
--------------------	--------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number. ‡ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐Approved for use through 10/31/99, OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 14493/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/719,080		
		Filing Date	11-21-2003		
		First Named Inventor	GRAUPE		
		Group Art Unit	1826		
		Examiner Name	Anderson, Rebecca		
Sheet	8	of	13	Attorney Docket Number	USAV2001/0082 - US - CNT

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	TS
RA		LIPSHUTZ, et al., Chiral induction in originally racemic amino acids via 5-acyl and 5-acyloxyaminoxazoles, 1st, J. Chem. 27(1):49-58 (1988), abstract.	
RA		LIPSHUTZ, et al., Heterocycles as masked diamide/dipeptide equivalents. Formation and reactions of substituted 5-(acylamino)oxazoles as intermediates en route to the cyclopeptide alkaloids, . Am. Chem. Soc., 105(26):7703-7713 (1983).	
RA		LIPSHUTZ, et al., Oxazolophanes as masked cyclopeptide alkaloid equivalents: cyclic peptide chemistry without peptide couplings, J. Am. Chem. Soc., 112(19):7032-7041 (1990).	
RA		MARQUIS, et al., Potent dipeptidylketone inhibitors of the cysteine protease cathepsin, Chemical Abstracts, 7:4 581-588 (1999).	
RA		MCMAH, et al., Direct dialkylation of peptide nitriles. Application of the synthesis of 1-aminocyclopropane-1 carboxylic acid (Aoc)-containing dipeptides, Bull. Soc. Chim. Fr. 134(1):105-110 (1997).	
RA		MORIYA, et al., Synthesis and Hypolipidemic Activities of 5-Thienyl-4-oxazoleacetic Acid Derivatives, sup.1, J. Med. Chem., 29: 333-341 (1986).	
RA		MOSER, et al., 130 Poly (dipeptamidinium)-Salze: definition und metoden zur preparativen herstellung. poly (dipeptamidinium) salze: definition and methods of preparation, Helvetica Chimica ACTA, CH, Verlag, Basel 69:1224-1262 (1986).	
RA		NIPPON, K., Patent Abstracts of Japan, Publication No. 63301868, 013(137)(1988), abstract.	
RA		NORTH, et al., Synthetic studies towards cyclic peptides. Concise synthesis of thiazoline and thiazole containing amino acids, Tetrahedron, 48(24):8627-8290 (1990).	
RA		OGILVIE, et al., Peptidomimetic inhibitors of the human cytomegalovirus protease, Journal of Medicinal Chemistry vol. 40 No. 25 (1997).	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
-----------------------	--------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number. * Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/089 (10-05)
 Approved for use through 10/31/99. OMB 0651-0031
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10/719,080	
			Filing Date	11-21-2003	
			First Named Inventor	GRAUPE	
			Group Art Unit	1626	
			Examiner Name	Anderson, Rebecca	
Sheet	9	of	13	Attorney Docket Number	USAV2001/0082 - US - CNT

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
RA		PICKEN, et al., Inhibition of bovine cathepsin B by amino acid-derived nitriles, Biochemical Society Transactions, vol. 18, No. 2, p:318 (1990).	
RA		PLIURA, et al., Comparative behavior of calpain and cathepsin B, Biochem. J. vol. 288, pp. 759-762, 1992	
RA		POLMAN, et al., Drug treatment of multiple sclerosis, BMJ, 321: 19-26 (2000).	
RA		RIESE, et al., Essential Role for Cathepsin S in MHC Class II-Associated Invariant Chain Processing and Peptide Loading, Immunity, 4: 357-366 (Apr. 1996).	
RA		SMITH, et al., New Inhibitors of Cysteine Proteinases, J. Am. Chem. Soc. vol. 110, No. 13, pp. 4429-4431, 1988	
RA		SUAVE, et al., Carboxymodified amino acids and peptides, I An efficient method for the synthesis of monofunctionalized enamines and monofunctionalized methyl ketone derivatives from thioamides via episulfides and thioiminium salts, Tetrahedron Lett, 29:19 2295-2299 (1988).	
RA		SUZUE, S., Hepatic agents. I. Synthesis of aminocyl (and hydroxyacyl) aminoacetonitriles, Chem. and Pharm. Bull. (Tokyo) (1968), 16(8), 1417-32.	
RA		SUZUE, et al., Studies on Hepatic Agents, Chem. Pharm. Bull. vol. 16, No. 8, pp. 1417-1432, Aug. 1968.	
RA		SUZUKI, et al., Synthesis of 2-Aryl-4-(3-thienyl)imidazole Derivatives with Antiinflammatory Properties .sup.1), Chem. Pharm. Bull, 34(8): 3111-3120 (1986).	
RA		TAO, et al., Inhibition of Calpain By Peptidyl Heterocycles, Bioorganic & Medicinal Chemistry Letters, 6:24 3009-3112 (1996).	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
--------------------	--------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐Approved for use through 10/31/99. OMB 0851-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448B/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/719,080		
		Filing Date	11-21-2003		
		First Named Inventor	GRAUPE		
		Group Art Unit	1628		
		Examiner Name	Anderson, Rebecca		
Sheet	10	of	13	Attorney Docket Number	USAV2001/0082 - US - CNT

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	TS
RA		THOMPSON, et al., Carboxyl-modified amino acids and peptides as protease inhibitors, J. Med. Chem., 29(1):104-111 (1986).	
RA		TSUTSUMI, et al., Synthesis and Structure-Activity Relationships of Peptidyl α-Keto Heterocycles as Novel Inhibitors of Prolyl Endopeptidase, Journal of Medicinal Chemistry, vol. 37, No. 21, p 3492-3502 (1994).	
RA		VARGHA, E., Peptide derivatives. VI. N-protected di- and tripeptide nitriles, Stud. Univ. Babeş-Bolyai, Ser. Chem., 13(2):31-6 (English abstract of article in Romanian) (1968).	
RA		VARGHESE, The structure and resonance Raman spectra-structure correlations for methoxycarbonyl-L-phenylalanyl-L-alanine ethyl dihydroester, Can. J. Chem., 64(8):1668-1673 (1986).	
RA		YAMADA, et al., Studies of unusual amino acids and their peptides. IX. The synthetic study of botomycins B1 and B2, Bul. Chem. Soc., Jpn. 51(3):878-83 (1978), abstract.	
RA		, Derwent Abstract of Japanese Patent Application 08-182189, (Jul. 12, 1994).	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
--------------------	--------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number. ‡ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

Approved for use through 10/31/99. OMB 0831-0031
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/719,080
		Filing Date	11-21-2003
		First Named Inventor	GRAUPE
		Group Art Unit	1826
		Examiner Name	Anderson, Rebecca
Sheet 11 of 13	Attorney Docket Number	USAV2001/0082 - US - CNT	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
RA		09/927,188		CAI, et al.	08-10-2001	
RA		09/927,324		BUTLER, et al.	08-10-2001	
RA		09/928,122		BREITENBUCHER, et al.	08-10-2001	
RA		09/948,214		GU, et al.	09-05-2001	
RA		10/042,585		QUIBELL, et al.	11-16-2001	
RA		10/148,612		OHMOTO, et al.	08-21-2002	
RA		10/148,613		OHMOTO, et al.	08-28-2002	
RA		10/181,713		OHMOTO, et al.	07-22-2002	
RA		10/181,799		OHMOTO, et al.	07-23-2002	
RA		10/231,425		BUXTON, et al.	08-28-2002	
RA		10/256,512		BEKKALI, et al.	09-27-2002	
RA		10/258,053		CUMMINGS, et al.	10-17-2002	
RA		10/275,583		COWEN, et al.	11-07-2002	
RA		10/279,424		BEKKALI, et al.	10-24-2002	
RA		10/466,385		QUIBELL, et al.	01-08-2004	
RA		6,015,791		GYORKOS, et al.	01-18-2000	
RA		6,608,057		CYWIN, et al.	08-18-2003	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Office ³	Number ⁴	Kind Code ² (if known)			
RA		JP	JP 2001-011037		SATO, et al.	01-16-2001	
RA		JP	JP 2001-055366		SATO, et al.	02-27-2001	
RA		WO	WO00/59881		SINGH, et al.	10-12-2000	
RA		WO	WO01/09169		SINGH, et al.	02-08-2001	
RA		WO	WO02/067248		QUIBELL, et al.	07-25-2002	
RA		WO	WO02/067249		QUIBELL, M	07-25-2002	
RA		WO	WO02/057270		QUIBELL, M	07-25-2002	
RA		WO	WO02/096892		OHMOTO, et al.	05-30-2002	
RA		WO	WO02/100948		HICKEY, et al.	12-19-2002	
RA		WO	WO02/20485		BEKKALI, et al.	03-14-2002	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
--------------------	--------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/88/088 (10-98)
Approved for use through 10/31/99. OMB 0831-0001
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/719,080
		Filing Date	11-21-2003
		First Named Inventor	GRAUPE
		Group Art Unit	1828
		Examiner Name	Anderson, Rebecca
Sheet	12	of	13
		Attorney Docket Number	USAV2001/0082 - US - CNT

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ²	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, aerial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ³
RA		CHAPMAN, et al., Emerging Roles for Cysteine Proteases in Human Biology, Ann. Rev. Physiol.; 1997; 59; pp.63-88.	
RA		DRANOFF, et al., Cathepsin S Required for Normal MHC Class II Peptide Loading and Germinal Center Development, Immunity; 1999; 10; pp.187-208.	
RA		FENWICK, et al., Diastereoselective Synthesis, Activity and Chiral Stability of Cyclic Alkoxyketone Inhibitors of Cathepsin K, Bioorg. Med. Chemm. Lett.; 2001; 11(2); pp.199-202.	
RA		FENWICK, et al., Solid-phase Synthesis of Cyclic Alkoxyketones, Inhibitors of the Cysteine Protease Cathepsin K, Bioorg. Med. Chem. Lett.; 2001; 11(2); pp.195-198.	
RA		GREENSPAN, et al., Identification of Dipeptidyl Nitrides as Potent and Selective Inhibitors of cathepsin B Through Structure-based Drug Design, J. Med. Chem.; 2001; 44; pp.4524-4534.	
RA		LOWE, et al., Kinetic Specificity in Papain-catalyzed Hydrolyses, Biochem. J.; 1971; 124(1); pp.107-118.	
RA		MACIEWICZ, et al., A comparison of Four Cathepsins (B,L,N and S) with Collagenolytic Activity From Rabbit Spleen, Biochem J.; 1988; 256; pp.433-440.	
RA		MARQUIS, et al., Azetone-based Inhibitors of Human and Rat Cathepsin K, J. Med. Chem.; 2000; 44(9); pp.1380-1395.	
RA		NAKAGAWA, et al., Impaired Invariant Chain Degradation and Antigen Presentation and Diminished Collagen-induced Arthritis in Cathepsin S-null Mice, Immunity; 1999; 10; pp.207-217.	
RA		OTTO, et al., Cysteine Proteases and their Inhibitors, Chem. Rev.; 1997; 97; pp.133-171.	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
--------------------	--------------------	-----------------	------------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

Approved for use through 10/31/89. OMB 0851-0031
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO			Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10/719,080
			Filing Date	11-21-2003
			First Named Inventor	GRAUPE
			Group Art Unit	1626
			Examiner Name	Anderson, Rebecca
			Attorney Docket Number	USAV2001/0082 - US - CNT
Sheet	13	of	13	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
RA		SHI, et al., Molecular Cloning and Expression of Human Alveolar Macrophage Cathepsin S, an Elastolytic Cysteine Protease, J. Biol. Chem.; 1992; 267; pp.7258-7262.	
RA		SINGH, et al., beta-lactams as Enzyme Inhibitors., IDrugs; 2000; 3(5); pp.512-517.	
RA		VILLADANGOS, et al., Cathepsin S Activity Regulates Antigen Presentation and Immunity, J. Clin. Invest.; 1998; 101(10); pp.2351-2363.	

Examiner Signature	/Rebecca Anderson/	Date Considered	06/13/2006
--------------------	--------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.